PROTOCOL FOR DEVELOPING

SOLID WASTE DISPOSAL PLAN

SALT RIVER RESERVATION

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BACKGROUND

The Salt River Pima-Maricopa Indian Community currently receives and disposes of waste from the cities of Scottsdale, Mesa and Chandler at their "Tri-City" solid waste disposal facility located adjacent to the Salt River on reservation land. Reservation residents also utilize this disposal site.

The Salt River Pima-Maricopa Indian Community operates the disposal facility with a cadre of local personnel using leased equipment consisting of dozers, graders, compactors and earth haulers to handle and/or cover the wastes. The wastes are compacted into excavations left after gravel is extracted by local gravel companies. The Indian community plans to use the land thus reclaimed for parks, golf courses, recreation areas or similar types of useful purposes, but has no structured plan to achieve these desires.

The following questions must be answered:

1. What is the expected life of the present disposal site?
2. What rate is it being filled?
3. When will the community run out of usable area and be forced to move the disposal operation to an alternate site?
4. Where is the alternate site and what would be the projected impact?

5. What guarantees can be given that the operation meets or will meet applicable federal guidelines for disposal and for future re-use?

The devastating flood of 1978 which toppled bridges, inundated communities and generally played havoc with everything in the river course also tore into a corner of the Tri-City disposal site. The effect was to scatter additional refuse down the river and to raise concern about the use of lands adjacent to the river course for disposal of wastes.

Flood water also permeated the in-place refuse where it was exposed and may have permeated the landfill elsewhere. The effect of water perculating through a landfill will often produce leachate. If leachate was produced in the landfill adjacent to the river, there are a number of questions which must be answered.

1. Where did the leachate go?

2. Did it return to the river channel when the water lowered, or did it seep into ground water aquifers?

3. Would this be a continuing problem everytime there is flood water, or can the disposal area be isolated and protected sufficiently to prevent a similar washout and refuse exposure?

This type of information has not been available to the Indian community concerning the impact of this operation on the surrounding environment.

Tribal leaders have manifested an interest in the possibilities of reuse or reclamation of those waste components that have market value. This raises the following questions:

1. What is the recycle potential of the waste that reaches the Tri-City site?

2. What markets exist in the Phoenix area?

3. What is the cost of separation and extraction of usable components?

4. Is the cost/benefit ratio favorable at this site?

5. What are the sources of funds available to finance such recycle operations if they should prove feasible?

6. To what extent would the recycling reduce the volume of waste reaching the site and how long would this extend the useful life of the site?

To answer these important questions concerning the present and future status of the Indian community's disposal operation, a comprehensive plan needs to be formulated. With such a plan, the Indian community, the customers served by the operation, the regulatory agencies, and all other interested parties would have the necessary information from which to make appropriate choices and pursue proper avenues of action.

SCOPE OF WORK

The following is a scope of work for the formulation of a comprehensive plan for the Salt River Pima-Maricopa Indian Community to use in taking appropriate action with regards to present and future solid waste disposal operations.

1. Compile information on the present and projected quantity of solid waste expected at the Tri-City disposal site.

2. Make projections concerning the expected life of the present disposal site.

3. Investigate the composition of waste sufficiently to determine potential recycle components and their respective volumes.

4. Investigate the recycle market for the Phoenix area and identify those that are cost effective for the Tri-City operation.

5. Outline the necessary components and identify the costs and cost/benefits of those recycle operations that appear cost effective. Determine what impact these operations would have on disposal volume and site longevity.

6. Obtain topographic and land use information and project the duration of the disposal operation. Outline a logical plan for systematic land use, taking into consideration the gravel mining operation, available land, river channelization and potential re-use of reclaimed lands.

7. Evaluate present disposal operations for effective equipment usage, overall economy of operation and adequacy of meeting necessary guidelines. Outline a plan for equipment utilization with recommendations for revisions, replacement, reduction or expansion. Identify what equipment will be needed to be most cost effective.

8. Evaluate what information is presently available on ground water movement and ground water recharge in this reach of the river. Determine if a problem exists and what can be done to resolve it if there is such a problem (i.e., lining or sealing the bottom and sides of the fill site).

9. Evaluate what diking, revetment, gabion, riprap, or other dike stabilization is required to prevent a reoccurance of the washout and provide continued protection. Determine if the site can be effectively isolated both hydraulically and structurally from the river?

10. Investigate potential alternate disposal sites that lie away from the river, but still on reservation land. Determine the economic

impact of each site's use including the cost of properly protecting the existing river-bottom site when it is discontinued. Determine the cost of excavating and removing all the present waste at the site if it cannot be properly protected from the ravages of the river.

11. Evaluate the present personnel management/training program and make recommendations for improved management of landfill site and training of site personnel.

12. Review the lease arrangements with sand gravel companies and show how they relate to the master plan for solid waste disposal.

13. Identify available resources to develop the final plan and assist in funding implementation.

SALT RIVER INDIAN COMMUNITY
SANITARY LANDFILL

(unaudited)
Financial Statement
for FY 79
ending 9-31-79

INCOME

City of Scottsdale	$181,277
City of Mesa	172,548
Gate & Misc.	380,954
City of Tempe	153,516
Interest	40,218
	$928,513

EXPENSES

Equipment Lease	$275,022
Salaries	116,645
Space Rental	105,686
Equipment Repair	67,858
Supplies - Gas & Oil	63,818
P/R Taxes	17,379
Audit/Accounting	15,230
General Insurance	16,620
Supplies - Office, Maint., Prog.	5,335
Utilities	2,249
Pension	2,522
Telephone	396
Bad Debt Reserve	15,000
Overhead at Established Rates	83,211
Auto Expense	1,419
	$788,390

NET PROFIT $140,123